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Categorizing Nonresponse Occurring in the 2007 June Area Survey (California, Kansas, New York, Virginia, and Washington)

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EXECUTIVE SUMMARY

The National Agricultural Statistics Service (NASS) surveys United States and Puerto Rico agriculture to estimate crops and livestock, assess production practices, and identify economic trends. Between 2000 and 2005, Kansas' June Area Survey (JAS) response rate decreased 17.5 percent, (from 79.1 percent to 62.6 percent). Due to this falling response rate for the JAS, NASS' Kansas Field Office (KS FO) wanted to know why nonresponse was increasing in the JAS and contacted NASS' Research and Development Division to examine the problem.

At the national level, the JAS' response rates from 2000 through 2007 have been gradually deteriorating at a half of a percentage point every year. Forecasting this negative trend forward, the response rate will drop below 80 percent within three to four years. At that time, the response rate will be below the federal government's threshold rate of 80 percent and raise additional concerns about the potential impact of nonresponse bias on the survey's results.

The study was expanded to include California, Kansas, New York, Virginia, and Washington. The field offices in these states were eager to learn more about their own state's nonresponse in the JAS.

The table, located on the next page, displays the primary reasons for nonresponse on the 2007 JAS from the combined data of the five test states. The authors recommend that nonresponse research be expanded to all states to better understand the deteriorating response rate of the JAS.

**Top Five Reasons for Nonresponse (Refusal & Inaccessible) Across the Five Test States
(California, Kansas, New York, Virginia and Washington)**

Reasons for Refusal
1. Would not take time / too busy.
2. Contact attempted, but respondent refuses on all surveys, and refused on this one.
3. The respondent feels that surveys hurt farmers more than help.
4. "I do not like surveys. / I do not do surveys."
5. Information too personal. / None of your business.

Reasons for Inaccessible
1. Tried several times; could not reach anyone for an appointment. Just an extremely busy person.
2. No respondent, as listed on the label, could be found.
3. No operation, as listed on the label, could be found.
4. Enumerator workload prevented this operation from being contacted during the survey period.
5. Access to the address on the label was denied by a gate / guard/ etc.

This exploration into the reasons for nonresponse, is a proactive step forward. It will provide NASS with valuable information on which areas of the data collection process need improvement and provide insight on how to accomplish this.

RECOMMENDATIONS

1. Expand the tracking and analyzing of nonresponse to all states in order to gain national insight into the reasons for nonresponse in the June Area Survey.

Impact: NASS will be able to determine if particular nonresponse reasons are state specific, regional and/or national. This will also enable NASS to focus on those aspects of the data collection process (questionnaire design, survey promotion, data collection) needing improvement. Thus, by increasing response rates, the quality of the estimates should improve.

2. Emphasize the importance of collecting nonresponse reasons at the survey workshops.
3. Designate a cell on the back page of the questionnaire for capturing the reasons for nonresponse. Use the interactive edit to verify that questionnaires marked refusal, inaccessible, or incomplete have valid nonresponse codes.
4. Ensure that field offices coordinate and follow-up with supervisory field enumerators to prevent any instances of questionnaires not being completed due to a heavy workload.

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Abstract

The National Agricultural Statistics Service (NASS) surveys farmers and ranchers across the United States and Puerto Rico in order to estimate crops and livestock, assess production practices, and identify economic trends. One of the surveys conducted annually is the June Area Survey (JAS). This survey requires field enumerators to visit sampled land areas (segments) designated on aerial photos and record all agricultural activity occurring within those specified land areas.

Over the past eight years, the national JAS's overall response rate has been gradually deteriorating from 86.5 percent in 2000 to 81.7 percent in 2007. Assuming this trend continues, the JAS national response rate will fall below the Office of Management and Budget's threshold rate of 80 percent in three to four years. Falling below this rate dictates the need for nonresponse bias analysis and, in general, heightens the concern about the potential negative impact of nonresponse on survey results.

This study examines some of the underlying causes of nonresponse in the 2007 June Area Survey in five states (California, Kansas, New York, Virginia, and Washington).

Key Words: Agriculture, Refusals, Inaccessibles, Data Collection, Nonresponse

1. INTRODUCTION

The National Agricultural Statistics Service's (NASS) primary purpose is to provide timely, accurate and

useful statistics on United States and Puerto Rico agriculture. NASS conducts hundreds of surveys for the purpose of making estimates on

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crops and livestock, exploring production practices, and identifying economic trends. The June Area Survey (JAS) is an annual survey that provides information on U.S. crops, livestock, grain storage capacity, and type and size of farms.

The JAS sample is comprised of designated land areas (segments). A typical segment is about one square mile -- equivalent to 640 acres. Field enumerators visit these segments and collect data on all agricultural activity occurring within the segment boundaries. Each segment is outlined on an aerial photo and provided to the field enumerator. A separate questionnaire is completed for each agricultural operation operating any land in the segment.

1.1 Problem: June Area Survey Deteriorating Response Rates

Over time, the JAS' response rate has been gradually decreasing by about a half of a percentage point a year. In 2000, the response rate was 86.5 percent. By 2007, the response rate had dropped to 81.7 percent. If this trend continues, the JAS' response rate will eventually fall below 80 percent within three to four years. Once below 80 percent, a nonresponse bias study will be required by the Office of Management and Budget (OMB). This research will provide NASS with greater insight for addressing and thus minimizing nonresponse.

The three types of nonresponse discussed in the study include: 1) refusals, 2) inaccessibles, and 3) incompletes.

Refusals are operators contacted for data collection, who were not willing to respond or participate in the survey.

Inaccessibles occur when field enumerators are unable to contact or reach the operators for data collection.

A questionnaire is considered "incomplete" if at least one of the questions is not answered.

Overall, survey nonresponse negatively impacts data estimates, increases survey costs and data collection time, and significantly complicates the data editing and summarizing processes. Nonresponse also increases the potential for bias which can not be easily assessed or explained/identified.

1.2 Purpose

Past nonresponse research has focused on other surveys; most notably the 2006 Agricultural Resource Management Survey Phase III (Gerling, Tran, Earp 2008).

However, this is the first formal nonresponse study on the JAS. The study's goal is to gain insight into the most common reasons for nonresponse occurring in the 2007 JAS. This will provide insight into what areas(s) of the survey process need to be addressed to prevent the response rates from falling any further.

1.3 Definitions

Segments: Land areas with identifiable boundaries such as ditches, roads, railroads, streams, etc. Segments serve as sampling units in the June Area Survey. Segments are assigned a permanent number and outlined in red on aerial

photos. Segments generally range in size from one-half square mile to three square miles.

Tract: An area of land inside a segment under one type of land operating arrangement. There are two types of tracts:
1.) Ag. Tract consists of agricultural land.
2.) Non-Ag Tract consists of residential, shopping centers, lakes, woods, and any land not considered agricultural at the time.

Usable: Completed reports (questionnaires) containing usable data.

1.) In the event of a refusal, the field enumerators were instructed to ask and record the operator's reasoning for not participating in the survey.

2.) For inaccessible, field enumerators were asked to document why the operator could not be contacted.

3.) For incompletes, the field enumerator would record why the operator did not answer specific questions.

4.) In all three cases, field enumerators were instructed to review a supplemental handout listing various nonresponse reasons. Each reason had its own corresponding code number. The field enumerator would then record this code in the *Office Use Box* of the questionnaire. [Appendix A contains a copy of the supplemental handout.]

Field enumerator training added an additional 15 minutes on average to the overall training workshop.

2. METHOD

The 2007 JAS's sample was comprised of 10,912 segments, across 49 states (excludes Alaska). The enumeration of these segments resulted in 41,518 tracts reporting agricultural activity. These tracts resulted in a national response rate of 81.7 percent usable, 8.7 percent refusing, and 9.6 percent recorded as inaccessible. Five states (California, Kansas, New York, Virginia, and Washington) participated in the study. Tables 1 and 2 in Section 3.1 show response counts and rates for each participating state.

2.1 Enumerator Training

Survey workshops are conducted annually to train field enumerators on the collection procedures for the JAS. For this study, the enumerators were provided the following instruction:

2.2 Project Costs

No additional field enumerator training costs were incurred since the nonresponse field training was absorbed into the general survey workshop. Also, no additional burden fell on the field enumerators since recording the reasons for the nonresponse is a requirement for all surveys.

3. FINDINGS

The results are discussed at the individual state level and as a group.

3.1 Overall Response Rates

Table 1 displays the number of segments surveyed and the number of agricultural and non-agricultural tracts within those segments. Usable agricultural tracts refer to those reports that have data and are deemed complete.

Table 2 shows the response rates for (California, Kansas, New York, Virginia, and Washington) as well as the U.S. average. Virginia's response rate was the only one that met OMB's 80 percent response rate requirement. The U.S. response rate (81.7 percent) exceeded OMB's requirement by a meager 1.7 percent.

Table 1: Number of Sampled Segments, Surveyed Agricultural Tracts Versus Usable Agricultural Tracts, and the Number of Non-Agricultural Tracts

State	Sample Size (No. of Segments)	No. of Agricultural Tracts		No. of Non-Agricultural Tracts
		Surveyed	Usable	
California	404	1,373	1,004	1,212
Kansas	487	1,651	1,237	585
New York	96	291	221	394
Virginia	179	579	506	340
Washington	267	674	530	1,602
U.S. ^{1/}	10,912	41,519	33,920	41,164

1/ Includes all 49 states.

Table 2: Agricultural Tracts: Overall Response Counts and Rates for the Five Test States and the U.S. Average.

State / Response Type	Usable		Refusal		Inaccessible ^{3/}	
	Count	Percent	Count	Percent	Count	Percent
California	1,004	73.1	175	12.7	194	14.1
Kansas	1,237	74.9	267	16.2	147	8.9
New York ^{1/}	221	75.9	25	8.6	45	15.5
Virginia	506	87.3	35	6.0	38	6.6
Washington	530	78.6	82	12.2	62	9.2
U.S. ^{2/}	33,920	81.7	3,613	8.7	3,986	9.6

1/ Total does not equal 100% due to rounding.

2/ Includes all 49 states.

3/ Includes Incompletes.

4. REASONS FOR REFUSALS

A refusal occurs when an operator declines to participate in the survey. In this case, the field enumerator records the reason for the refusal, determines which nonresponse reason best matches the situation from the supplemental handout, and finally codes the questionnaire appropriately.

The findings are displayed in Table 3. The data (five states combined) revealed that “*Refused but no reason given.*” occurred 27.6 percent of the time on 121 reports.

There were 146 reports for which the field enumerators failed to record a nonresponse code in the office use box. These 146 reports were not counted in the analysis. The authors recommend that field offices re-emphasize to the field enumerators the importance of collecting nonresponse data, so that NASS can better understand the rationale of the growing refusal population.

Of those questionnaires marked as refusal and having valid nonresponse codes, the top three reasons for refusal were: 1.) “*Would not take time/ too busy,*” 2.) “*Contact attempted, but respondent refuses on all surveys, and refused this one,*” and 3.) “*The respondent feels that surveys and reports hurt the farmer more than help.*”

Overall, with the exception of Washington, the results did not vary across states. The second highest ranked reason for refusal, “*Would not take time / too busy,*” occurred on only 2 percent of the Washington reports compared with 9 to 29 percent in the other states. Also, the third highest ranked reason for refusal, “*Contact attempted, but respondent refuses on all surveys,*” occurred 26.4 percent of the time in Washington, but only between 5 and 17 percent in the other states. (See Appendix B for individual state specific tables.)

Table 3: Reasons For Refusals

Reasons for Refusal	California Count	California Percent	Kansas Count	Kansas Percent	New York Count	New York Percent	Virginia Count	Virginia Percent	Washington Count	Washington Percent	5 States Combined Count	5 States Combined Percent
Refused but no reason given.	27	26.5	70	29.2	6	28.6	9	40.9	9	17.0	121	27.6
Would not take time / too busy	18	17.6	55	22.9	6	28.6	2	9.1	1	1.9	82	18.7
Contact attempted, but respondent refuses on all surveys, and refused this one.	17	16.7	29	12.1	3	14.3	1	4.5	14	26.4	64	14.6
The respondent feels that surveys and reports hurt the farmer more than help.	1	1.0	16	6.7	0	0.0	0	0.0	8	15.1	25	5.7
"I do not like surveys / I do not do surveys."	6	5.9	13	5.4	1	4.8	0	0.0	4	7.5	24	5.5
Information too personal / none of your business.	7	6.9	12	5.0	1	4.8	0	0.0	2	3.8	22	5.0
"I will have nothing to do with the Government."	6	5.9	10	4.2	1	4.8	2	9.1	0	0.0	19	4.3
Known refusal, no contact attempted.	9	8.8	1	0.4	1	4.8	2	9.1	1	1.9	14	3.2
Respondent only does compulsory surveys.	5	4.9	4	1.7	1	4.8	0	0.0	0	0.0	10	2.3

Table 3 Continued: Reasons For Refusals

Reasons for Refusal	California Count	California Percent	Kansas Count	Kansas Percent	New York Count	New York Percent	Virginia Count	Virginia Percent	Washington Count	Washington Percent	5 States Combined Count	5 States Combined Percent
Does not believe in statistics, so will not complete an interview.	0	0.0	4	1.7	0	0.0	0	0.0	3	5.7	7	1.6
Family illness / death.	2	2.0	4	1.7	0	0.0	0	0.0	1	1.9	7	1.6
"You contact me too often"	1	1.0	4	1.7	1	4.8	1	4.5	0	0.0	7	1.6
I did this survey before, but not again.	0	0.0	3	1.3	0	0.0	1	4.5	2	3.8	6	1.4
Would not answer the door even though they were home.	0	0.0	3	1.3	0	0.0	1	4.5	1	1.9	5	1.1
Violent / threatening refusal.	0	0.0	2	0.8	0	0.0	0	0.0	2	3.8	4	0.9
Does not think the information is kept confidential.	1	1.0	2	0.8	0	0.0	0	0.0	1	1.9	4	0.9
Feels the survey items are too complex - too much recollection is involved.	0	0.0	3	1.3	0	0.0	0	0.0	0	0.0	3	0.7
Would not keep appointments	0	0.0	3	1.3	0	0.0	0	0.0	0	0.0	3	0.7

Table 3 Continued: Reasons For Refusals

Reason for Refusal	California Count	California Percent	Kansas Count	Kansas Percent	New York Count	New York Percent	Virginia Count	Virginia Percent	Washington Count	Washington Percent	5 States Combined Count	5 States Combined Percent
"My farm is too small to count / too small to be representative".	0	0.0	1	0.4	0	0.0	1	4.5	0	0.0	2	0.5
The operator called the office after reviewing the pre-survey letter, and asked not to be contacted further.	0	0.0	0	0.0	0	0.0	0	0.0	2	3.8	2	0.5
Spouse/secretary / etc. will not let the enumerator see the operator.	1	1.0	0	0.0	0	0.0	1	4.5	0	0.0	2	0.5
"I just did a survey for someone else."	0	0.0	0	0.0	0	0.0	1	4.5	0	0.0	1	0.2
Mentions a specific grievance with the FO or NASS (other than confidentiality).	0	0.0	0	0.0	0	0.0	0	0.0	1	1.9	1	0.2
Wants to be paid for interview time.	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	1	0.2
"This is not a farm".	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2
Quitting farming.	0	0.0	0	0.0	0	0.0	0	0.0	1	1.9	1	0.2
Missing ¹ (Reason not recorded).	73	N/A	27	N/A	4	N/A	13	N/A	29	N/A	146	N/A
Total ^{2/}	175	100.2	267	99.9	25	100.3	35	99.7	82	100.2	584	99.9

1/ Missing means field enumerator failed to record the reason for the refusal.

2/ Percent total excludes those missing a reason for the nonresponse. Also percent total may be less than or greater than 100% due to rounding.

In 1990 and 1991, NASS examined reasons for nonresponse occurring on the Agricultural Resource Management Survey Phase III (ARMS III), (O'Connor 1991 & 1992). ARMS III aims to understand the financial welfare of the farming industry by asking detailed questions regarding farming expenses and income.

Although the JAS and ARMS III surveys differ in several ways (questionnaire, focus, and sampling scheme), a comparison of reasons for refusal across studies was

conducted. Table 4 displays the 2007 JAS' top five refusal reasons in rank order, according to the past ARMS III studies.

A comparison of nonresponse reasons reported in JAS versus ARMS III shows similar ranking of refusal reasons, thus implying that the primary reasons are consistent with those from the previous studies. However, without further research, including multiple states over several years, such conclusions can not be validated.

Table 4: Comparison Ranking of the Reasons for Refusal on the 2007 June Area Survey Study with the 1990 & 1991 ARMS III Studies

2007 June Area Survey Study Ranking	1991 ARMS III Study Ranking	1990 ARMS III Study Ranking	Reason for Refusal ^{1/}
1	1	1	Would not take the time / too busy.
2	5	3	Contact attempted but respondent refuses on all surveys, and refused on this one.
3	4	6	The respondent feels that surveys and reports hurt the farmer more than help.
4	3	4	"I do not like surveys / I do not do surveys."
5	2	2	Information too personal. / None of your business.

^{1/} Excludes "Refused but no reason given."

5. REASONS FOR INACCESSIBLES

A questionnaire is recorded as inaccessible if the field enumerator was unable to contact the operator. For inaccessible, the field enumerators were instructed to code the nonresponse reason on the questionnaires.

The findings are displayed in Table 5. There were 155 reports recorded as inaccessible for which the field enumerator failed to record a reason. These reports were removed from the analysis. An additional 93 reports were cited as *"Inaccessible but no reason provided."* In the case of refusals, "no reason" is valid, but for inaccessible it is not. This signifies that the field enumerators failed to record the required nonresponse information. Therefore, the authors recommend that field office staff emphasize the importance of

collecting and recording reasons for inaccessibility.

The top five reasons for questionnaires being coded as "inaccessible" are displayed in Table 5. The number one reason for this coding was, *"Tried several times; could not reach anyone for an appointment"*.

A disturbing discovery is that in 11 instances questionnaires were coded inaccessible because the field enumerator's heavy workload precluded contacting these operators. Unlike other nonresponse reasons, this is an area that NASS can prevent by managing workloads more efficiently and by maintaining better communication with field enumerators. Therefore, the authors recommend expanding the exploration of nonresponse to all states, because the cost is trivial and the benefit of reducing nonresponse is high.

Table 5: Reasons for Inaccessibles

Reasons for Inaccessible/Incomplete	California Count	California Percent	Kansas Count	Kansas Percent	New York Count	New York Percent	Virginia Count	Virginia Percent	Washington Count	Washington Percent	Five States Combined Count	Five States Combined Percent
Tried several times, could not reach anyone for an appointment. Just an extremely busy person.	47	42.7	44	34.6	0	0.0	15	55.6	22	57.9	128	39.4
Inaccessible, but no reason given.	20	18.2	59	46.5	8	34.8	1	3.7	5	13.2	93	28.6
No respondent, as listed on the label, could be found.	18	16.4	8	6.3	10	43.5	2	7.4	1	2.6	39	12.0
No operation, as listed on the label could be found.	5	4.5	2	1.6	0	0.0	3	11.1	1	2.6	11	3.4
Enumerator workload prevented this operation from being contacted during the survey period.	0	0.0	2	1.6	4	17.4	0	0.0	5	13.2	11	3.4
Access to the address on the label was denied by a gate / guard / etc.	6	5.5	1	0.8	0	0.0	2	7.4	1	2.6	10	3.1
Illness / death in the family prevents the operator from responding.	4	3.6	4	3.1	0	0.0	1	3.7	0	0.0	9	2.8

Table 5 Continued: Reasons for Inaccessibles

Reasons for Inaccessible/Incomplete	California Count	California Percent	Kansas Count	Kansas Percent	New York Count	New York Percent	Virginia Count	Virginia Percent	Washington Count	Washington Percent	Five States Combined Count	Five States Combined Percent
The operator is away on an extended vacation.	3	2.7	4	3.1	0	0.0	1	3.7	1	2.6	9	2.8
The operator is away on business.	3	2.7	0	0.0	1	4.3	0	0.0	1	2.6	5	1.5
The operator is away on a brief vacation.	0	0.0	2	1.6	0	0.0	2	7.4	0	0.0	4	1.2
The address on the label is vacant / burned out/ no structure exists.	3	2.7	0	0.0	0	0.0	0	0.0	0	0.0	3	0.9
Respondent postponed the interview beyond the end of the survey period.	0	0.0	0	0.0	0	0.0	0	0.0	1	2.6	1	0.3
Non-English speaking respondent; interpreter not available.	1	0.9	0	0.0	0	0.0	0	0.0	0	0.0	1	0.3
Farm records are not available until after the survey period closes.	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	1	0.3
Missing ^{1/} (Reason not recorded)	79	N/A	20	N/A	21	N/A	11	N/A	24	N/A	155	N/A
Total	189	99.7	147	100.0	44	100.0	38	100.0	62	99.9	480	100

1/ Missing denotes field enumerator failed to record the reason for the refusal. Not counted in the percent.

2/ Percent total excludes those missing a reason for the nonresponse. Also percent total may be less than or greater than 100% due to rounding

Table 6 compares the 2007 JAS study's top five reasons for recording a questionnaire as an inaccessible with those from past ARMS III studies.

Unlike refusals, the rankings varied across studies. In the 1990 ARMS III study, the main reason for inaccessibility was "*The operator is away on extended vacation.*" This was ranked tenth in the JAS study. Differences in reported reasons for nonresponse suggest that there may be

something unique to JAS (questionnaire, sampling scheme, time, publicity, etc...) creating these differences between studies. Also, the time differences between when the ARMS studies were conducted in the early 90's and the JAS study was carried out in 2007 may also be a factor. Further research is thus required to determine the reason for the variability in nonresponse across these surveys.

Table 6: Comparison Ranking of the Reasons for Inaccessibles on the 2007 June Area Survey Study with the 1990 & 1991 ARMS III Studies

2007 June Area Survey Study Ranking	1991 ARMS III Study Ranking	1990 ARMS III Study Ranking	Reasons for Inaccessible
1	1	4	Tried several times; could not reach anyone for an appointment. Just an extremely busy person.
2	9	5	No respondent, as listed on the label, could be found.
3	12	11	No operation, as listed on the label, could be found.
4	14 ^{t/}	13	Enumerator workload prevented this operation from being contacted during the survey period.
5	13	9	Access to the address on the label was denied by a gate/ guard/ etc...

t/ Represents a tie.

6. INCOMPLETES

A report is coded as an incomplete if the respondent provided partial information, but

would not or could not provide enough information to make the questionnaire complete. Table 7 shows that incompletes are rare.

Table 7: Incompletes by State and their Contribution to their State's Nonresponse

Incompletes by State	Number	Percent of State's Nonresponse
California	5	0.4
Kansas	3	0.1
New York	1	0.3
Virginia	0	0
Washington	0	0

7. LESSONS LEARNED

Analysis of the data uncovered 36 inaccessible operations incorrectly coded as refusals. Sixteen operations that refused to complete the JAS were incorrectly coded as inaccessible. There were 301 questionnaires missing a nonresponse reason code. Therefore, the authors recommend an edit check be developed to verify the existence of a valid nonresponse code for questionnaires coded as a refusal or inaccessible.

For future nonresponse studies to run more efficiently and effectively, the authors recommend designating a cell on the back of the questionnaire where the reason for nonresponse can be recorded.

8. CONCLUSION

Understanding the reasons for nonresponse provides NASS with a starting point for

addressing future nonresponse on the June Area Survey. As the understanding of nonresponse increases, so does NASS' ability to minimize/prevent it. NASS can use this information in demonstrating best practices for handling refusals and inaccessible. Research and Development Division will continue to work with field offices in studying nonresponse in the hopes of effectively increasing future response rates.

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Appendix A

Reasons for Nonresponse Coding Sheet

Reasons for Refusals, Incompletes and Inaccessibles

Code	Reasons for Refusals
1	Known refusal, no contact attempted.
2	Contact attempted, but respondent refuses on all surveys, and refused on this one.
3	Refused, but no reason given.
4	Would not take the time / too busy.
5	Information too personal / none of your business.
6	The respondent feels that surveys and reports hurt the farmer more than help.
7	"I did this survey before, but not again."
8	"I just did a different survey for your office."
9	"I just did a survey for someone else."
10	"I will have nothing to do with the Government."
11	"I do not like surveys / I do not do surveys."
12	Respondent only does compulsory surveys.
13	Does not think the information is kept confidential.
14	Mentions a specific grievance with the SSO or NASS (other than confidentiality).
15	Mentions a specific grievance with the state cooperator.
16	"My farm is too small to count / too small to be representative"
17	"You contact me too often."
18	The respondent feels the operation's records are inadequate to complete the interview.
19	Farm records are at the tax advisors / lawyers.
20	Family illness / death.
21	Would not keep appointments.
22	Spouse / secretary / etc. will not let the enumerator see the operator.
23	Wants to be paid for interview time and effort.
24	Violent / threatening refusals.
25	Does not want to talk about farming.
26	Does not want to report due to legal / financial problems.
27	Quitting farming.
28	Out of business now, will not answer for the previous year.
29	Figures for the previous year were not typical.
32	"This is not a farm."
34	Will do other surveys, but not financial surveys.
52	Questionnaire was not sent to the field to avoid jeopardizing cooperation on other surveys.
53	Would not answer the door even though they were home.
365	The operator called the office after receiving the pre-survey letter, and asked not to be contacted further.
366	Does not believe in statistics, so will not complete an interview.
400	Technical problems -- data stored electronically and are currently not accessible.
401	Never heard of NASS.
402	Feels the survey items are too complex -- too much recollection is involved.
403	Currently has or recently had disease problem with herd/crops.

Code	Reasons for Inaccessibles and Incompletes
75	No operation, as listed on the label, could be found.
76	No respondent, as listed on the label, could be found.
78	The address on the label is vacant / burned out / no structure exists.
79	The operator is away on an extended vacation.
80	The operator is away on a brief vacation.
81	The operator is away on business.
82	The address on the label is summer-seasonal housing.
83	Access to the address on the label was denied by a gate / guard / etc.
84	Illness / death in the family prevents the operator from responding.
85	Farm records are not available until after the survey period closes.
86	Respondent postponed the interview beyond the end of the survey period.
87	Enumerator workload prevented this operation from being contacted during the survey period.
92	Non-English speaking respondent; interpreter not available.
94	Inaccessible, but no reason given.
116	Tried several times; could not reach anyone for an appointment. Just an extremely busy person.
150	INCOMPLETE -- Respondent provided partial information, but would not or could not provide enough information to make the questionnaire complete.

Appendix B

Reasons for Refusals by State

Table B1: Reasons for Refusing to Participate in the 2007 June Area Survey in California

Frequency	Percent	Reason for Refusal
27	26.5	Refused, but no reason given.
18	17.6	Would not take the time / too busy.
17	16.7	Contact attempted, but respondent refuses on all surveys, and refused on this one.
9	8.8	Known refusal, no contact attempted.
7	6.9	Information too personal / none of your business.
6	5.9	"I do not like surveys / I do not do surveys."
6	5.9	"I will have nothing to do with the Government."
5	4.9	Respondent only does compulsory surveys.
2	2.0	Family illness / death.
1	1.0	"You contact me too often."
1	1.0	The respondent feels that surveys and reports hurt the farmer more than help.
1	1.0	Spouse / secretary / etc. will not let the enumerator see the operator.
1	1.0	"This is not a farm."
1	1.0	Does not think the information is kept confidential.
73	N/A	Missing Data (No reason provided on the questionnaire.)
175	100.2	TOTAL (Missing Data is not counted in percent total.)

1/ Percent total may be less than or greater than 100% due to rounding.

Table B2: Reasons for Refusing to Participate in the 2007 June Area Survey in Kansas

Frequency	Percent	Reason for Refusal
70	29.2	Refused, but no reason given.
55	22.9	Would not take the time / too busy.
29	12.1	Contact attempted, but respondent refuses on all surveys, and refused on this one.
16	6.7	The respondent feels that surveys and reports hurt the farmer more than help.
13	5.4	"I do not like surveys / I do not do surveys."
12	5.0	Information too personal / none of your business.
10	4.2	"I will have nothing to do with the Government."
4	1.7	Respondent only does compulsory surveys.
4	1.7	Does not believe in statistics, so will not complete an interview.
4	1.7	"You contact me too often."
4	1.7	Family illness / death.
3	1.3	I did this survey before, but not again.
3	1.3	Feels the survey items are too complex – too much recollection is involved.
3	1.3	Would not keep appointments.
3	1.3	Would not answer the door even though they were home.
2	0.8	Violent / threatening refusal.
2	0.8	Does not think the information is kept confidential.
1	0.4	"My farm is too small to count / too small to be representative."
1	0.4	Known refusal, no contact attempted.
1	0.4	Wants to be paid for interview time and effort.
27	N/A	Missing Data (No reason provided on the questionnaire.)
267	99.9	TOTAL (Missing Data is not counted in percent total.)

1/ Percent total may be less than or greater than 100% due to rounding.

Table B3: Reasons for Refusing to Participate in the 2007 June Area Survey in New York

Frequency	Percent	Reason for Refusal
6	28.6	Refused, but no reason given.
6	28.6	Would not take the time / too busy.
3	14.3	Contact attempted, but respondent refuses on all surveys, and refused on this one.
1	4.8	"I do not like surveys. / I do not do surveys."
1	4.8	Information too personal / none of your business.
1	4.8	"I will have nothing to do with the Government."
1	4.8	Respondent only does compulsory surveys.
1	4.8	"You contact me too often."
1	4.8	Known refusal, no contact attempted.
4	N/A	Missing Data (No reason provided on the questionnaire.)
25	100.3	TOTAL (Missing Data is not counted in percent total.)

1/ Percent total may be less than or greater than 100% due to rounding.

Table B4: Reasons for Refusing to Participate in the 2007 June Area Survey in Virginia

Frequency	Percent	Reason for Refusal
9	40.9	Refused, but no reason given.
2	9.1	Would not take the time / too busy.
2	9.1	Known refusal, no contact attempted.
2	9.1	"I will have nothing to do with the Government."
1	4.5	"I just did a survey for someone else."
1	4.5	"You contact me too often."
1	4.5	I did this survey before, but not again.
1	4.5	Spouse / secretary / etc. will not let the enumerator see the operator.
1	4.5	Would not answer the door even though they were home.
1	4.5	"My farm is too small to count / too small to be representative."
1	4.5	Contact attempted, but respondent refuses on all surveys, and refused on this one.
13	N/A	Missing Data (No reason provided on the questionnaire.)
35	99.7	TOTAL (Missing Data is not counted in percent total.)

1/ Percent total may be less than or greater than 100% due to rounding.

Table B5: Reasons for Refusing to Participate in the 2007 June Area Survey in Washington

Frequency	Percent	Reason for Refusal
14	26.4	Contact attempted, but respondent refuses on all surveys, and refused on this one.
9	17.0	Refused, but no reason given.
8	15.1	The respondent feels that surveys and reports hurt the farmer more than help.
4	7.5	"I do not like surveys / I do not do surveys."
3	5.7	Does not believe in statistics, so will not complete an interview.
2	3.8	Violent / threatening refusal.
2	3.8	I did this survey before, but not again.
2	3.8	Information too personal / none of your business.
2	3.8	The operator called the office after reviewing the pre-survey letter, and asked not to be contacted further.
1	1.9	Quitting farming.
1	1.9	Would not take the time / too busy.
1	1.9	Would not answer the door even though they were home.
1	1.9	Family illness / death.
1	1.9	Mentions a specific grievance with the FO or NASS (other than confidentiality).
1	1.9	Does not think the information is kept confidential.
1	1.9	Known refusal, no contact attempted.
29	N/A	Missing Data (No reason provided on the questionnaire.)
82	100.2	TOTAL (Missing Data is not counted in percent total.)

1/ Percent total may be less than or greater than 100% due to rounding.

Appendix C

Reasons for Inaccessibles and Incompletes by State

Table C1: Reasons for Inaccessibles in the 2007 June Area Survey in California

Number	Percent	Reason for Inaccessible
47	42.7	Tried several times; could not reach anyone for an appointment. Just an extremely busy person.
20	18.2	Inaccessible, but no reason given.
18	16.4	No respondent, as listed on the label, could be found.
6	5.3	Access to the address on the label was denied by a gate / guard / etc.
5	4.5	No operation, as listed on the label could be found.
4	3.6	Illness / death in the family prevent the operator from responding.
3	2.7	The operator is away on an extended vacation.
3	2.7	The address on the label is vacant / burned out/ no structure exists.
3	2.7	The operator is away on business.
1	0.9	Non-English speaking respondent; interpreter not available.
79	N/A	Missing Data (No reason provided on the questionnaire.)
189	99.7	TOTAL (Missing Data is not counted in percent total.)

1/ Percent total may be less than or greater than 100% due to rounding.

Table C2: Reasons for Inaccessibles in the 2007 June Area Survey in Kansas

Number	Percent	Reason for Inaccessible
59	46.5	Inaccessible, but no reason given.
44	34.6	Tried several times; could not reach anyone for an appointment. Just an extremely busy person.
8	6.3	No respondent, as listed on the label, could be found.
4	3.1	Illness / death in the family prevent the operator from responding.
4	3.1	The operator is away on an extended vacation.
2	1.6	No operation, as listed on the label could be found.
2	1.6	The operator is away on a brief vacation.
2	1.6	Enumerator workload prevented this operation from being contacted during the survey period.
1	0.8	Farm records are not available until after the survey period closes.
1	0.8	Access to the address on the label was denied by a gate / guard / etc.
20	N/A	Missing Data (No reason provided on the questionnaire.)
147	100.0	TOTAL (Missing Data is not counted in percent total.)

Table C3: Reasons for Inaccessibles in the 2007 June Area Survey in New York

Number	Percent	Reason for Inaccessible
10	43.5	No respondent, as listed on the label, could be found.
8	34.8	Inaccessible, but no reason given.
4	17.4	Enumerator workload prevented this operation from being contacted during the survey period.
1	4.3	The operator is away on business.
21	N/A	Missing Data (No reason provided on the questionnaire.)
44	100.0	TOTAL (Missing Data is not counted in percent total.)

Table C4: Reasons for Inaccessibles in the 2007 June Area Survey in Virginia

Number	Percent	Reason for Inaccessible
15	55.6	Tried several times; could not reach anyone for an appointment. Just an extremely busy person.
3	11.1	No operation, as listed on the label could be found.
2	7.4	The operator is away on a brief vacation.
2	7.4	Access to the address on the label was denied by a gate / guard / etc.
2	7.4	No respondent, as listed on the label, could be found.
1	3.7	Illness / death in the family prevent the operator from responding.
1	3.7	The operator is away on an extended vacation.
1	3.7	Inaccessible, but no reason given.
11	N/A	Missing Data (No reason provided on the questionnaire.)
38	100.0	TOTAL (Missing Data is not counted in percent total.)

Table C5: Reasons for Inaccessibles in the 2007 June Area Survey in Washington

Number	Percent	Reason for Inaccessible
22	57.9	Tried several times; could not reach anyone for an appointment. Just an extremely busy person.
5	13.2	Enumerator workload prevented this operation from being contacted during the survey period.
5	13.2	Inaccessible, but no reason given.
1	2.6	No respondent, as listed on the label, could be found.
1	2.6	The operator is away on an extended vacation.
1	2.6	No operation, as listed on the label could be found.
1	2.6	The operator is away on business.
1	2.6	Respondent postponed the interview beyond the end of the survey period.
1	2.6	Access to the address on the label was denied by a gate / guard / etc.
24	N/A	Missing Data (No reason provided on the questionnaire.)
62	99.9	TOTAL (Missing Data is not counted in percent total.)

1/ Percent total may be less than or greater than 100% due to rounding.